IN THE CLAIMS

1. (currently amended) Module for heating intake gases of an internal combustion engine, the module comprising:

~~electronic temperature control for heating the gases circulating through an intake pipe (13) by means of a heating element (1) connected to a battery (9) from which it receives a supply via a power control circuit (4) controlled by an electronic control unit (ECU) (12) of the engine,~~

~~a frame to which the power control circuit (4) is adhered and in which the heating element (1), consisting of at least one heating resistance, is installed, both forming the same module to allow electronic control of the temperature of the intake gases;~~

~~wherein the power control circuit comprises a control logic (8) to which is connected to a single temperature sensor (3), and at least one power switch (6) which controls the heating element (1).~~

a frame comprising a single temperature sensor;

a power control circuit disposed in the frame, the power control circuit controlled by an electronic control unit of the combustion engine, the power control circuit comprising a control circuit and a power switch, the control circuit in communication with the single temperature sensor;

an electronic temperature control for heating the intake gases circulating through an intake pipe; and

a heating element disposed in the frame, the heating element connected to a battery to receive a power supply, the heating element comprising at least at least one resistance ribbon strip controlled by the power switch.

2. (Cancelled)

3. (previously presented) Module for heating the intake gases of an internal combustion engine, incorporating an electronic temperature control, according to Claim 1, ~~characterised in that~~wherein the power control circuit (4) is mounted on a ceramic base (1) adhered with a heat conducting product to the frame (2) itself.

4. (Original) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to ~~Claim 2~~claim 1, ~~characterised in that~~ wherein the power control circuit (4) is provided with a power switch (6) for each of the heating resistances configuring the heating element (1).

5. (previously presented) Module for heating the intake gases of internal combustion engine, of ~~claim 2~~claim 1, wherein the power control circuit (4) runs a supply connection (9) which is led to the positive terminal of the battery,

wherein an electrical conductor (5) which connects it to the heating element (1),the heating element being connected to the earth of the metal frame (2) at its other end, and a control connector (7) which transmits the temperature signals picked up by the temperature sensor (3) to the electronic control unit of the engine, which responds by transmitting signals to the control circuit (4) for regulating the power applied to the heating element (1) via the control logic (8) and the power switches (6).

6. (previously presented) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 1, ~~characterised in that~~wherein the temperature sensor (3) is thermally connected to the frame (2), since it is integrated in the actual power control circuit (4) to provide the temperature control.

7. (previously presented) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 1, ~~characterised in that~~wherein the temperature sensor (3) is inserted in the wall of the intake manifold (14) for providing the temperature control.

8. (previously presented) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 1, ~~characterised in that~~wherein the temperature sensor (3) is integrated in the heating element (1) for providing the temperature control.

9. (previously presented) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to ~~Claim1~~ Claim 1, ~~characterised in that~~wherein the temperature sensor (3) is located downstream from the heating element (1).

10. (currently amended) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 1, ~~characterised in that~~wherein the heating element (1) ~~consists of at least one resistance of the strip type, with~~ comprising ceramic insulants (11) in which the resistance (1) is supported and expands in order to absorb expansions and avoid deformations.

11. (currently amended) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 10, ~~characterised in that~~wherein there are separate ceramic insulants (11) for each resistance.

12. (currently amended) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 10, ~~characterised in that~~wherein the ceramic insulants (11) form a single monobloc part which includes all the resistances.

13. (currently amended) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 1, ~~characterised in that~~wherein it is installed in manifolds composed of materials with a low operating temperature.

14. (currently amended) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 13, ~~characterised in that~~wherein it is installed in a plastic intake manifold.

15. (currently amended) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 1, ~~characterised in that~~wherein the frame (2) is of metal, preferably aluminium.

16. (currently amended) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 7, ~~characterised in that~~wherein the connection of the temperature sensor (3) to the control circuit (4) is made by means of cables (15).

17. (currently amended) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 16, ~~characterised in that~~wherein an additional connector (16) is arranged between the cable (15) and the temperature sensor.

18. (currently amended) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 5, ~~characterised in that~~wherein the electrical conductor (5) is integrated and hermetically sealed inside the module to prevent tampering and possible supply of the heating element (1) from the outside.

19. (new) Module for heating the intake gases of internal combustion engine, incorporating an electronic temperature control, according to Claim 1, wherein the module is combination with a plastic manifold.

20. (new) In combination with a plastic manifold, a module for heating intake gases of an internal combustion engine, the module comprising:

a frame comprising a single temperature sensor;

a power control circuit disposed in the frame, the power control circuit controlled by an electronic control unit of the combustion engine, the power control circuit comprising a control circuit and a power switch, the control circuit in communication with the single temperature sensor;

an electronic temperature control for heating the intake gases circulating through an intake pipe; and

a heating element disposed in the frame, the heating element connected to a battery to receive a power supply, the heating element comprising at least at least one resistance heat element controlled by the power switch.